

What really are the best 100m performances?

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The title of the “Fastest Man in the World” has always resided in the domain of the 100m champion. There is perhaps no greater test of strength, power, and agility for a human being. In late July 1997, this title returned to its home in Canada as our own Donovan Bailey crossed the finish line in a remarkable 9.84s, even after a relatively slow reaction time of 0.174s and a small tail wind of +0.7 m/s. His incredible top speed of 12.1 m/s is further support to his claim on the title.

However, this race was run with a non-zero tail wind. That is, Bailey had an advantage not over his competitors, but over 100m times from other races. While the legal wind speed limit is +2.0 m/s for the 100m and 200m sprints, one can never discount the fact that a race run with a +1.9 m/s tail wind has an implicit advantage over a race run with a 0.0 m/s tailwind, or even a headwind, for that matter. Despite these rules, is it possible to compare *all* 100m races on a more or less equal footing?

The answer, to a degree, is “yes”, and results from a little application of the physics of fluid mechanics. A runner moving through a wind with an arbitrary velocity experiences either a resistive or propulsive force, as well as a drag effect. The former are the result of Newtonian mechanics (force laws), and the drag depends on such factors as the runner’s mass, speed, cross-sectional area, and density of surrounding air.

It was determined that a sprinter loses between 3–6% of his/her energy in overcoming the drag. A simple formula to compensate for accompanying wind speeds was derived to calculate the equivalent still-air (zero wind speed) race times; for the conservative limit of 3%, this is

$$t_0 \approx \left[1.03 - 0.03 \times \left(1 - \frac{W \times t_W}{100} \right)^2 \right] \times t_W , \quad (1)$$

where t_W is the recorded race time, W is the wind speed, and t_0 is the equivalent still-air time. You can do it with your own race times!

So, how would the record books look if this formula was a standard application to world class performances? Adjustments of various sets of 100m times (denoted by t_0 and t_W , respectively) are shown in the accompanying

tables. For sheer comparison, Ben Johnson’s disqualified WR performances of 1987 and 1988 are included.

1 World Rankings

One of the most fascinating results can be found in Table 2, the wind-corrected performances. Donovan Bailey’s 9.84s WR adjusts to a 9.88s equivalent in calm air. Meanwhile, Frank Fredricks’ 9.86s clocking (Lausanne, 03 Jul 1996) was run with a wind reading of -0.4 m/s, which after correction surpasses Bailey’s WR performance by 0.04s! It is certainly conceivable that, given the proper conditions, Fredricks could have claimed the elusive title of “World’s Fastest Man” with this race. In fact, if Fredricks had given this same performance in Atlanta (*i.e.* with a wind speed of $+0.7$ m/s), he would have crossed the line in roughly 9.81s!

It should be noted that, due to the drag effects mentioned earlier, races run into a head wind will have faster corresponding times than races run with a tail wind of equivalent strength. Figure 1 shows that the “correction curve” is not linear, but rather a curve bending toward the right. Hence, a head wind will fall on the “steeper” portion of the curve, while a tail wind will be on the shallower side.

The 9.84s WR would rank 6th all-time if we included banned performances (Table 3). After correcting for the wind conditions, (Table 4), this time climbs to 5th, but is surpassed by several different performances. Thompson’s 9.69s run has a wind-corrected equivalent of 9.93s, and has sunk to 16th. Meanwhile, Davidson Ezinwa’s 9.91s race (into a 2.3 m/s headwind) has a wind-corrected 9.76s equivalent. Note that this performance is marked with a “d”, indicating a doubtful wind reading¹.

Florence Griffith-Joyner’s 100m WR performance of 10.49s at the 1988 US Olympic Trials is skeptical. It has been noted that, at the time of this race (second heat of the second round), the wind gauge for the 100m straight read a speed of $+0.0$ m/s, whereas a nearby gauge (for the jumps runway) read speeds in excess of $+4.0$ m/s. Furthermore, the wind reading for the third heat was $+5.0$ m/s. This mysterious sudden calm was never really addressed; it is unreasonable to assume that the wind would die down

¹It is generally known that athletes who race at altitude perform better than they do closer to sea level, and it has been suggested that this effect may be more physiological in nature than physical, since the corresponding change in air density does not yield the expected change in race time.

completely for the duration of one race. So, assuming that the wind speed was actually between +4.0 m/s and +5.0 m/s during Flo-Jo’s “WR” race, she would have actually clocked a time somewhere in the range of 10.70s – 10.74s for a still wind, which would be much more consistent with her other performances (her time of 10.61s in the final was legal, however, with a wind speed of +1.2 m/s).

2 Canadian Rankings

This analysis also shows some neat results of local interest. For example, Bailey’s 9.84s WR from Atlanta rounds to a 9.88s still-air equivalent. Furthermore, if the correction formula (1) is applied to Bailey’s Atlanta splits², these times could be compared with indoor performances (where there is no wind speed) over the same distance. In this case, one finds 50m and 60m times of 5.63s and 6.53s, respectively. The former (5.63s) is only 0.07s slower than his 50m 5.56s indoor WR (Reno, NV, 09 Feb 1996), a difference which could perhaps be accounted for by reaction time; *i.e.* if Bailey had a reaction time of around 0.11–0.12s for his 50m WR, then these results would be consistent. The latter (6.53s) is 0.02s off his 1997 indoor PB of 6.51s (Maebashi, Japan, 08 Feb 1997). This would tend to suggest that Bailey’s Olympic 100m WR was consistent with his other PB performances.

The 1996 100m rankings can be similarly restructured. Table 8 shows the top 46 performances, accounting for wind assistance, and Tables 6,7 show the top 10 legal and wind-corrected rankings. The Canadian rankings do not suffer as much of a restructuring as do the World rankings.

3 Conclusions

Who, then, did run the fastest 100m race ever? Based on this model, and discounting substance-assisted performances, doubtful wind readings, and hand-times, Fredricks comes out the winner, and Bailey has to settle for 2nd. Only 3 of the top 20 performances are now sub-9.90, whereas before 8 out of 20 were under this mark. The third fastest wind-corrected time is Christie’s; it would have been interesting had he not false-started out of the final in Atlanta. Only about 7 of the top 20 wind-corrected athletes will be

²The formula has to be modified for the distance, though; the ‘100’ in the numerator changes to 50 and 60 to correspond to the race distance. Although, it doesn’t make much of a difference to leave it as 100.

competing this year (who knows if Christie will be back with a vengeance?). We'll most likely see the most sub-9.90s races to date. Most importantly, though, Fredricks has the real potential to better Bailey's existing record. Of course, Bailey will also have the same potential. It seems quite likely that the 100m WR drop from its 1996 mark. Will we see a sub-9.80s race? If so, who will be the one to run it? Based on their best races last year, Bailey could run a 9.79s with a +1.7m/s tailwind, while Fredricks would need a mere +1.0m/s! With more training under their belt, who knows what to expect. Watch for a showdown between these two at the 1997 WC!

References

- [1] *Canadian Athletics Annual: 1996 in Review*, C. Smith ed., Athletics Canada (1997).
- [2] W. G. Pritchard, "Mathematical Models of Running", *SIAM Review* **35**, 359-379 (1993).
- [3] R. Tibshirani, "Who is the Fastest Man in the World?", *to be published American Statistician* (1996).

| # | t_w | W | Athlete | Location | Date |
|----|-------|------|----------------------|----------------|-------------|
| 1 | 9.84 | +0.7 | Donovan Bailey CAN | Atlanta, GA | 27 Jul 1996 |
| 2 | 9.85 | +1.2 | Leroy Burrell USA | Lausanne, SWI | 06 Jul 1994 |
| 3 | 9.86 | −0.4 | Frank Fredericks NAM | Lausanne, SWI | 03 Jul 1996 |
| 4 | 9.86 | +1.2 | Carl Lewis USA | Tokyo, JAP | 25 Aug 1991 |
| 5 | 9.87 | +0.3 | Linford Christie GBR | Stuttgart, GER | 15 Aug 1993 |
| 6 | 9.87 | +1.9 | Fredricks NAM | Helsinki, FIN | 25 Jun 1996 |
| 7 | 9.88 | +1.2 | Burrell USA | Tokyo, JAP | 25 Aug 1991 |
| 8 | 9.89 | +0.7 | Fredericks NAM | Atlanta, GA | 27 Jul 1996 |
| 9 | 9.90 | +0.7 | Ato Boldon TRI | Atlanta, GA | 27 Jul 1996 |
| 10 | 9.90 | +1.9 | Burrell USA | New York, NY | 14 Jun 1991 |
| 11 | 9.91 | +1.3 | Bailey CAN | Montréal, PQ | 15 Jul 1995 |
| 12 | 9.91 | +1.5 | Dennis Mitchell USA | Milan, ITY | 07 Sep 1996 |
| 13 | 9.91 | +1.9 | Christie GBR | Victoria, BC | 23 Aug 1994 |
| 14 | 9.92 | +0.3 | Andre Cason USA | Stuttgart, GER | 15 Aug 1993 |
| 15 | 9.92 | +0.8 | Boldon TRI | Eugene, OR | 01 Jun 1996 |
| 16 | 9.92 | +1.1 | Lewis USA | Seoul, SK | 24 Sep 1988 |
| 17 | 9.92 | +1.1 | Mitchell USA | Atlanta, GA | 16 Jun 1996 |
| 18 | 9.92 | +1.2 | Christie GBR | Tokyo, JAP | 25 Aug 1991 |
| 19 | 9.93 | −0.6 | Mike Marsh USA | Walnut, CA | 18 Apr 1992 |
| 20 | 9.93 | −0.6 | Boldon TRI | Atlanta, GA | 27 Jul 1996 |

Table 1: Men’s Top 20 fastest legal 100m times, ranked according to increasing tail-wind speed (for equal time runs).

| New | Old | | t_0 | t_W | W | Athlete | Date |
|-----|-----|---|-------|-------|------|----------------------|-------------|
| 1 | 3 | | 9.84 | 9.86 | -0.4 | Frank Fredericks NAM | 03 Jul 1996 |
| 2 | 1 | | 9.88 | 9.84 | +0.7 | Donovan Bailey CAN | 27 Jul 1996 |
| 3 | 5 | | 9.89 | 9.87 | +0.3 | Linford Christie GBR | 15 Aug 1996 |
| 4 | 56 | | 9.89 | 9.97 | -1.3 | Leroy Burrell USA | 01 Aug 1992 |
| 5 | 57 | D | 9.90 | 9.97 | -1.2 | Ben Johnson CAN | 19 Aug 1987 |
| 6 | 20 | | 9.90 | 9.93 | -0.6 | Ato Boldon TRI | 27 Jul 1996 |
| 8 | 21 | | 9.91 | 9.93 | -0.4 | Bailey CAN | 03 Jul 1996 |
| 9 | 29 | | 9.91 | 9.94 | -0.5 | Fredericks NAM | 27 Jul 1996 |
| 10 | 2 | | 9.92 | 9.85 | +1.2 | Burrell USA | 06 Jul 1994 |
| 11 | 30 | | 9.92 | 9.94 | -0.4 | Boldon TRI | 03 Jul 1996 |
| 12 | 46 | D | 9.93 | 9.96 | -0.6 | Davidson Ezinwa NGR | 18 Apr 1992 |
| 13 | - | w | 9.93 | 9.69 | +5.7 | Obadele Thompson BAR | 13 Apr 1996 |
| 14 | 4 | | 9.93 | 9.86 | +1.2 | Carl Lewis USA | 25 Aug 1991 |
| 15 | 8 | | 9.93 | 9.89 | +0.7 | Fredericks NAM | 27 Jul 1996 |
| 16 | 37 | | 9.94 | 9.95 | -0.3 | Boldon TRI | 27 Jul 1996 |
| 17 | 14 | | 9.94 | 9.92 | +0.3 | Andre Cason USA | 15 Aug 1993 |
| 18 | 9 | | 9.94 | 9.90 | +0.7 | Boldon TRI | 27 Jul 1996 |
| 19 | 7 | | 9.95 | 9.88 | +1.2 | Burrell USA | 25 Aug 1991 |
| 20 | 47 | | 9.96 | 9.96 | -0.1 | Cason USA | 14 Aug 1993 |

Table 2: Men’s Top 20 fastest wind-corrected 100m times, including wind-aided performances (w) and legal times from athletes caught for doping during their career (D).

| Rank | | t_W | W | Athlete | Location | Date |
|------|---|-------|-------|----------------------|------------------|-------------|
| 1 | w | 9.69 | +5.7 | Obadele Thompson BAR | El Paso, TX | 13 Apr 1996 |
| 2 | w | 9.78 | +5.2 | Carl Lewis USA | Indianapolis, IN | 16 Jul 1988 |
| 3 | B | 9.79 | +1.1 | Ben Johnson CAN | Seoul, SK | 24 Sep 1988 |
| 4 | w | 9.79 | +4.5 | Andre Cason USA | Eugene, OR | 16 Jun 1993 |
| 5 | B | 9.83 | +1.0 | Johnson CAN | Rome, ITY | 30 Aug 1987 |
| 6 | w | 9.85 | +4.8 | Dennis Mitchell USA | Eugene, OR | 17 Jun 1993 |
| 7 | w | 9.87 | +11.2 | William Snoddy USA | Dallas, TX | 01 Apr 1978 |
| 8 | w | 9.87 | +4.9 | Calvin Smith USA | Indianapolis, IN | 16 Jul 1988 |
| 9 | w | 9.88 | +2.3 | James Sanford USA | Westwood, CA | 03 May 1980 |
| 10 | w | 9.88 | +4.0 | Bailey CAN | Duisburg, GER | 12 Jun 1996 |
| 11 | w | 9.88 | +5.2 | Albert Robinson USA | Indianapolis, IN | 16 Jul 1988 |
| 12 | w | 9.88 | +5.3 | Maurice Greene USA | Austin, TX | 08 Apr 1995 |
| 13 | w | 9.89 | +2.9 | Mike Marsh USA | Walnut, CA | 14 Apr 1995 |
| 14 | w | 9.89 | +4.1 | Frank Fredericks NAM | Tokyo, JAP | 24 Aug 1991 |
| 15 | w | 9.89 | +4.2 | Raymond Stewart JAM | Indianapolis, IN | 09 Aug 1987 |
| 16 | w | 9.90 | +3.7 | Johnson CAN | Ottawa, ON | 06 Aug 1988 |
| 17 | w | 9.90 | +5.2 | Joe DeLoach USA | Indianapolis, IN | 16 Jul 1988 |
| 18 | d | 9.91 | -2.3 | Davidson Ezinwa NGR | Azusa, CA | 11 Apr 1992 |
| 19 | f | 9.91 | +1.2 | Mitchell USA | Tokyo, JAP | 25 Aug 1991 |
| 20 | w | 9.91 | +4.2 | Mark Witherspoon USA | Indianapolis, IN | 09 Aug 1987 |

Table 3: Men’s Top 20 fastest illegal 100m times, including wind-aided performances (w), doubtful wind readings (d), false starts (f). Ben Johnson’s disqualified WR performances of 1987 and 1988 are shown for comparison.

| Rank | | t_0 | t_W | W | Athlete | Date |
|------|---|-------|-------|------|----------------------|-------------|
| 1 | d | 9.76 | 9.91 | -2.3 | Davidson Ezinwa NGR | 11 Apr 1992 |
| 2 | h | 9.80 | 9.70 | +1.9 | Donovan Powell JAM | 19 May 1995 |
| 3 | | 9.84 | 9.86 | -0.4 | Frank Fredericks NAM | 03 Jul 1996 |
| 4 | B | 9.85 | 9.79 | +1.1 | Ben Johnson CAN | 24 Sep 1988 |
| 5 | | 9.88 | 9.84 | +0.7 | Donovan Bailey CAN | 27 Jul 1996 |
| 6 | B | 9.89 | 9.83 | +1.0 | Ben Johnson CAN | 30 Aug 1987 |
| 7 | | 9.89 | 9.87 | +0.3 | Linford Christie GBR | 15 Aug 1993 |
| 8 | | 9.89 | 9.97 | -1.3 | Leroy Burrell USA | 01 Aug 1992 |
| 9 | | 9.90 | 9.93 | -0.6 | Ato Boldon TRI | 27 Jul 1996 |
| 10 | | 9.90 | 9.93 | -0.6 | Boldon TRI | 27 Jul 1996 |
| 11 | D | 9.90 | 9.97 | -1.2 | Johnson CAN | 19 Aug 1987 |
| 12 | | 9.91 | 9.93 | -0.4 | Bailey CAN | 03 Jul 1996 |
| 13 | | 9.91 | 9.94 | -0.5 | Fredericks NAM | 27 Jul 1996 |
| 14 | | 9.92 | 9.85 | +1.2 | Burrell USA | 06 Jul 1994 |
| 15 | | 9.92 | 9.94 | -0.4 | Boldon TRI | 03 Jul 1996 |
| 16 | w | 9.93 | 9.69 | +5.7 | Obadele Thompson BAR | 13 Apr 1996 |
| 17 | D | 9.93 | 9.96 | -0.6 | Ezinwa NGR | 18 Apr 1992 |
| 18 | | 9.93 | 9.86 | +1.2 | Carl Lewis USA | 25 Aug 1991 |
| 19 | | 9.93 | 9.89 | +0.7 | Fredericks NAM | 27 Jul 1996 |
| 20 | | 9.94 | 9.95 | -0.3 | Boldon TRI | 27 Jul 1996 |

Table 4: Men’s Top 20 fastest wind-corrected 100m times, including wind-aided performances (w), doubtful wind readings (d), legal performances of athletes caught for doping during their career (D), and disqualified times from athletes caught for doping during their career (B).

| # | | t_0 | t_w | v_w | Athlete | Date |
|----|---|-------|-------|-------|------------------------------|-------------|
| 1 | w | 10.67 | 10.54 | +2.1 | Florence Griffith-Joyner USA | 25 Sep 1988 |
| 2 | | 10.69 | 10.62 | +1.0 | Griffith-Joyner USA | 24 Sep 1988 |
| 3 | | 10.69 | 10.61 | +1.2 | Griffith-Joyner USA | 17 Jul 1988 |
| 4 | d | 10.70 | 10.49 | +4.0 | Griffith-Joyner USA | 16 Jul 1988 |
| 5 | | 10.75 | 10.82 | -1.0 | Gail Devers USA | 01 Aug 1992 |
| 6 | | 10.76 | 10.83 | -1.0 | Juliet Cuthbert JAM | 01 Aug 1992 |
| 7 | | 10.77 | 10.84 | -1.0 | Irina Privalova RUS | 01 Aug 1992 |
| 8 | | 10.79 | 10.86 | -1.0 | Gwen Torrence USA | 01 Aug 1992 |
| 9 | | 10.80 | 10.87 | -1.0 | Merlene Ottey JAM | 07 Aug 1991 |
| 10 | | 10.80 | 10.82 | -0.3 | Ottey JAM | 16 Aug 1993 |
| 11 | | 10.81 | 10.70 | +1.6 | Griffith-Joyner USA | 17 Jul 1988 |
| 12 | | 10.81 | 10.84 | -0.5 | Devers USA | 23 Aug 1996 |
| 13 | | 10.81 | 10.78 | +0.4 | Ottey JAM | 03 Sep 1994 |
| 14 | | 10.83 | 10.74 | +1.3 | Ottey JAM | 07 Sep 1996 |
| 15 | | 10.83 | 10.77 | +0.9 | Privalova RUS | 06 Jul 1994 |
| 16 | A | 10.84 | 10.79 | +0.6 | Evelyn Ashford USA | 03 Jul 1983 |
| 17 | | 10.84 | 10.84 | +0.0 | Ottey JAM | 10 Jul 1991 |
| 18 | A | 10.85 | 10.78 | +1.0 | Dawn Sowell USA | 03 Jun 1989 |
| 19 | | 10.85 | 10.82 | +0.4 | Torrence USA | 03 Sep 1994 |
| 20 | | 10.85 | 10.85 | | Torrence USA | 18 May 1996 |

Table 5: Women’s Top 20 fastest wind-corrected 100m times, including only wind-aided and altitude (A) performances. Griffith-Joyner’s 10.54s clocking has been assigned a wind reading of +2.1 m/s, since no accurate wind reading was found.

| Rank | | t_W | W | Athlete | Location | Date |
|------|---|-------|------|------------------|------------------|-------------|
| 1 | | 9.84 | +0.7 | Donovan Bailey | Atlanta, GA | 27 Jul 1996 |
| 2 | | 10.03 | +0.7 | Bruny Surin | Paris, FRA | 29 Jun 1996 |
| 3 | | 10.16 | +1.9 | Glenroy Gilbert | Duisberg, GER | 12 Jun 1996 |
| 4 | A | 10.18 | +1.5 | Robert Esmie | Colorado Sp., CO | 08 Jun 1996 |
| 5 | | 10.19 | +0.8 | Carlton Chambers | Eugene, OR | 29 May 1996 |
| 6 | | 10.30 | +0.0 | Andy Breton | Kalamazoo, MI | 04 May 1996 |
| 7 | | 10.37 | +1.1 | Peter Ogilvie | Austin, TX | 04 May 1996 |
| 8 | A | 10.40 | +0.5 | Anthony Wilson | Flagstaff, AZ | 11 May 1996 |
| 9 | | 10.41 | +1.0 | Dave Tomlin | Montreal, PQ | 21 Jun 1996 |
| 10 | | 10.43 | +1.8 | Okiki Akinremi | Eich/Abbost, BC | 02 Jun 1996 |
| | w | 9.88 | +4.0 | Donovan Bailey | Duisburg, GER | 12 Jun 1996 |
| | w | 9.97 | +2.1 | Bailey | Atlanta, GA | 18 May 1996 |
| | w | 10.08 | +3.4 | Robert Esmie | Kitchener, ON | 09 Aug 1996 |
| | w | 10.39 | +4.4 | Esmie | Kitchener, ON | 09 Aug 1996 |
| | w | 10.13 | +4.0 | Glenroy Gilbert | Duisburg, GER | 12 Jun 1996 |
| | w | 10.18 | +3.1 | Carlton Chambers | College Park, MD | 19 Apr 1996 |
| | w | 10.27 | +3.4 | Dave Tomlin | Kitchener, ON | 09 Aug 1996 |

Table 6: Canadian Men’s Top 10 fastest official 100m times, including altitude performances (A); wind-aided times are unranked.

| New | Old | | t_0 | t_W | W | Athlete | Location | Date |
|-----|-----|---|-------|-------|------|----------------|----------------|-------------|
| 1 | 1 | | 9.88 | 9.84 | 0.7 | Donovan Bailey | Atlanta, GA | 27 Jul 1996 |
| 2 | 2 | | 10.03 | 10.05 | -0.4 | Surin | Lausanne, SWI | 03 Jul 1996 |
| 3 | 3 | | 10.18 | 10.18 | 0.0 | Gilbert | Montréal, PQ | 21 Jun 1996 |
| 4 | 5 | | 10.22 | 10.22 | 0.0 | Chambers | Montréal, PQ | 21 Jun 1996 |
| 5 | 4 | w | 10.26 | 10.08 | 3.4 | Robert Esmie | Kitchener, ON | 09 Aug 1996 |
| 6 | 6 | | 10.30 | 10.30 | 0.0 | Andy Breton | Kalamazoo, MI | 04 May 1996 |
| 7 | 8 | A | 10.44 | 10.40 | 0.5 | Anthony Wilson | Flagstaff, AZ | 11 May 1996 |
| 8 | 7 | | 10.44 | 10.37 | 1.1 | Peter Ogilvie | Austin, TX | 04 May 1996 |
| 9 | 11 | | 10.44 | 10.44 | 0.0 | Abass Tanko | Sherbrooke, PQ | 08 Jun 1996 |
| 10 | 9 | w | 10.45 | 10.27 | 3.4 | Dave Tomlin | Kitchener, ON | 09 Aug 1996 |

Table 7: Canadian Men’s Top 10 fastest wind-corrected 100m times, including altitude performances (A).

| Rank | | t_0 | t_W | W | Athlete | Location | Date |
|------|---|-------|-------|------|------------------|------------------|-------------|
| 1 | | 9.88 | 9.84 | 0.7 | Donovan Bailey | Atlanta, GA | 27 Jul 1996 |
| 2 | | 9.91 | 9.93 | -0.4 | Bailey | Lausanne, SWI | 3 Jul 1996 |
| 3 | | 9.97 | 10.00 | -0.5 | Bailey | Atlanta, GA | 27 Jul 1996 |
| 4 | | 9.98 | 9.98 | +0.0 | Bailey | Montréal, PQ | 21 Jun 1996 |
| 5 | | 10.03 | 10.05 | -0.4 | Surin | Lausanne, SWI | 3 Jul 1996 |
| 6 | | 10.04 | 9.95 | 1.5 | Bailey | Milan, ITA | 7 Sep 1996 |
| 7 | | 10.04 | 10.04 | 0.0 | Surin | Montréal, PQ | 21 Jun 1996 |
| 8 | | 10.06 | 10.13 | -1.2 | Surin | Atlanta, GA | 26 Jul 1996 |
| 9 | w | 10.07 | 9.88 | 4.0 | Donovan Bailey | Duisburg, GER | 12 Jun 1996 |
| 10 | | 10.08 | 10.03 | 0.7 | Bruny Surin | Paris, FRA | 29 Jun 1996 |
| 11 | w | 10.09 | 9.97 | 2.1 | Bailey | Atlanta, GA | 18 May 1996 |
| 12 | | 10.18 | 10.18 | 0.0 | Gilbert | Montréal, PQ | 21 Jun 1996 |
| 13 | | 10.20 | 10.11 | 1.5 | Surin | Milan, ITA | 7 Sep 1996 |
| 14 | | 10.22 | 10.22 | 0.0 | Chambers | Montréal, PQ | 21 Jun 1996 |
| 15 | | 10.24 | 10.19 | 0.8 | Carlton Chambers | Eugene, OR | 29 May 1996 |
| 16 | w | 10.26 | 10.08 | 3.4 | Robert Esmie | Kitchener, ON | 9 Aug 1996 |
| 17 | | 10.26 | 10.22 | 0.6 | Gilbert | Hechtel, BEL | 6 Jul 1996 |
| 18 | A | 10.27 | 10.18 | 1.5 | Robert Esmie | Colorado Sp., CO | 8 Jun 1996 |
| 19 | | 10.27 | 10.16 | 1.9 | Glenroy Gilbert | Duisberg, GER | 12 Jun 1996 |
| 20 | | 10.28 | 10.28 | 0.0 | Esmie | Montréal, PQ | 21 Jun 1996 |
| 21 | | 10.28 | 10.28 | 0.0 | Esmie | Montréal, PQ | 21 Jun 1996 |
| 22 | | 10.30 | 10.30 | 0.0 | Andy Breton | Kalamazoo, MI | 4 May 1996 |
| 23 | w | 10.33 | 10.13 | 4.0 | Glenroy Gilbert | Duisburg, GER | 12 Jun 1996 |
| 24 | | 10.34 | 10.23 | 1.8 | Gilbert | Stockholm, SW | 8 Jul 1996 |
| 25 | w | 10.35 | 10.18 | 3.1 | Carlton Chambers | College Park, MD | 19 Apr 1996 |
| 26 | | 10.40 | 10.40 | 0.0 | Esmie | Montréal, PQ | 21 Jun 1996 |
| 27 | | 10.42 | 10.35 | 1.0 | Chambers | Montréal, PQ | 21 Jun 1996 |
| 28 | A | 10.44 | 10.40 | 0.5 | Anthony Wilson | Flagstaff, AZ | 11 May 1996 |
| 29 | | 10.44 | 10.37 | 1.1 | Peter Ogilvie | Austin, TX | 4 May 1996 |
| 30 | | 10.44 | 10.44 | 0.0 | Abass Tanko | Sherbrooke, PQ | 8 Jun 1996 |

| | | | | | | | |
|----|---|-------|-------|------|-------------------|-----------------|-------------|
| 31 | w | 10.45 | 10.27 | 3.4 | Dave Tomlin | Kitchener, ON | 9 Aug 1996 |
| 32 | | 10.46 | 10.46 | −0.1 | Esmie | Kerkrade, HOL | 17 May 1996 |
| 33 | | 10.48 | 10.41 | 1.0 | Dave Tomlin | Montréal, PQ | 21 Jun 1996 |
| 34 | | 10.54 | 10.43 | 1.8 | Okiki Akinremi | Eich/Abbost, BC | 2 Jun 1996 |
| 35 | | 10.55 | 10.52 | 0.4 | Esmie | Stockholm, SW | 8 Jul 1996 |
| 36 | | 10.57 | 10.57 | 0.0 | Bradley McCuaig | Montréal, PQ | 21 Jul 1996 |
| 37 | | 10.58 | 10.55 | 0.4 | Trevino Betty | Montréal, PQ | 21 Jun 1996 |
| 38 | | 10.59 | 10.48 | 1.8 | Chambers | Stockholm, SW | 8 Jul 1996 |
| 39 | | 10.59 | 10.59 | 0.0 | Sheridan Baptiste | Baton Rouge, LA | 11 May 1996 |
| 40 | | 10.60 | 10.49 | 1.8 | Ricardo Greenidge | Rich/Abbost, BC | 2 Jun 1996 |
| 41 | | 10.61 | 10.61 | −0.1 | Kofi Yevakpor | Sherbrooke, PQ | 15 Jul 1996 |
| 42 | w | 10.61 | 10.39 | 4.4 | Esmie | Kitchener, ON | 9 Aug 1996 |
| 43 | | 10.63 | 10.60 | 0.4 | Charles Allen | Kitchener, ON | 7 Jun 1996 |
| 44 | | 10.67 | 10.64 | 0.4 | Bryce Coad | Kitchener, ON | 7 Jun 1996 |
| 45 | | 10.70 | 10.63 | 1.0 | Troy Dos Santos | Montréal, PQ | 21 Jun 1996 |

Table 8: Canadian Men’s Top fastest wind–corrected 100m times,including altitude performances (A).

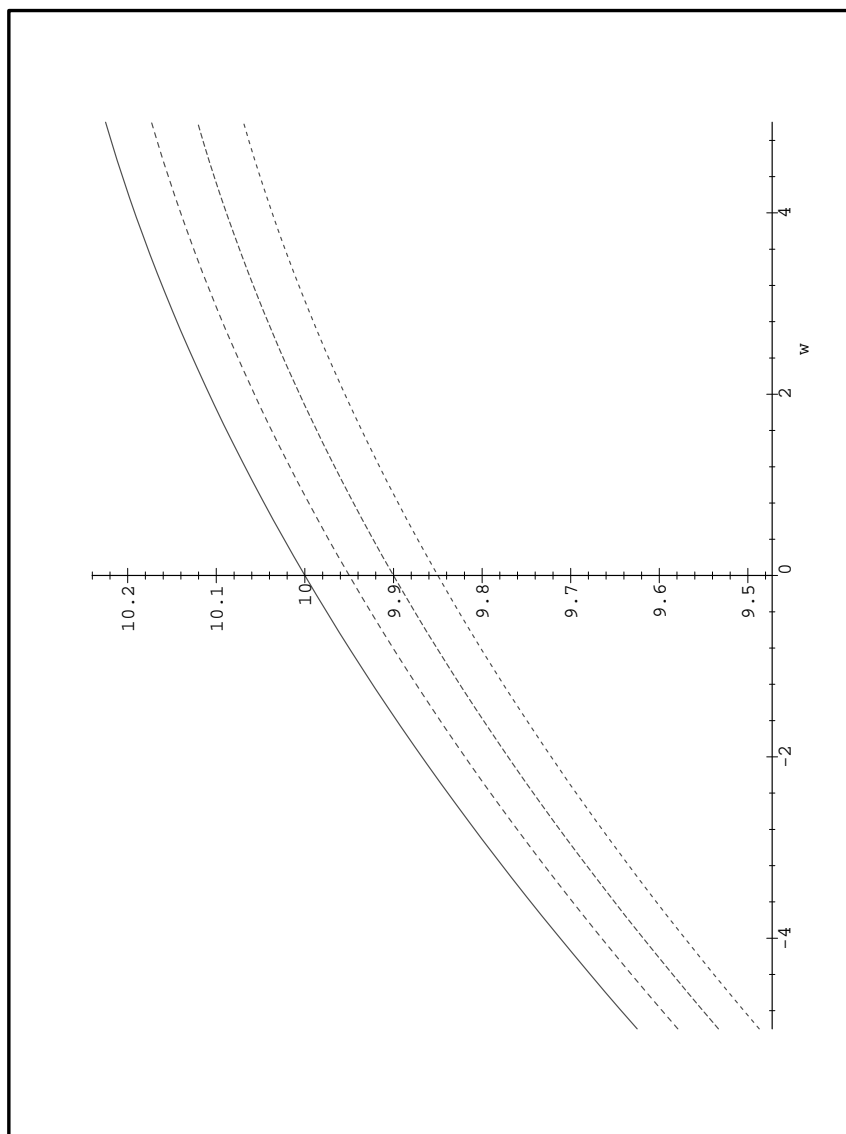


Figure 1: Wind-correction curves for wind-assisted times of 10.00s (upper solid), 9.95 (second), 9.90 (third), and 9.85 (bottom). Wind speed is w .